

REQUEST FOR QUALIFICATIONS (RFQ) RFQ 08-015

The City of Houston intends to enter into contract with a professional engineer to provide engineering services for the projects listed below. The work to be performed by the engineer under the proposed contract shall consist of professional engineering services per the city's standard design contract (available for reference at: http://www.publicworks.cityofhouston.gov/documents/procedures/cip_projects/standard_engineering_services_contract.pdf). The award of this contract is dependant on the City of Houston being awarded federal grant funds from FHWA. The City has applied for these funds; however, no decision by FHWA has been made. If the grant is not awarded to the City, these contracts will not be awarded.

To qualify for selection, the submitting firm must have a professional engineer, registered in Texas who can sign and seal the work to be performed in the contract. To be considered for evaluation, firms should submit a specific statement of qualifications (SOQ) for the project(s) and may not submit more than one response to this RFQ or be subject to disqualification.

The submittal shall include a transmittal letter. Following the transmittal letter shall be a one-page letter from each sub-consulting firm proposed in the submittal indicating that firm's desire to be included and indicating a general statement of the scope of services that the sub-consultant will perform if the submitting firm is selected. A copy of the submitting firm's response to questionnaire pertaining to "Conflict of Interest" submitted to the City Secretary should also be included. Local Government Code Chapter 176 requires firms seeking to do business with the City of Houston ("City") to file a Conflict of Interest Questionnaire with the City Secretary. The Conflict of Interest Questionnaire is available for downloading on the Texas Ethics Commission's website at <http://www.ethics.state.tx.us/forms/CIQ.pdf>. The completed Conflict of Interest Questionnaire will be posted on the City Secretary's website. It is the submitting firm's responsibility to submit the latest version of the Conflict of Interest questionnaire form as promulgated by the Texas Ethics Commission.

The length of submittal document shall not exceed ten 8 1/2 x 11 pages (single sided). The submittal shall include:

- Specific technical capabilities of the firm(s) for the project(s);
- Prior demonstrated experience in accomplishing similar projects;
- Demonstrated timeliness on similar projects;
- Demonstrated ability to find cost saving/cost effective solutions;
- Examples of effective services rendered during the construction phase of projects engineered by the firm;
- Specific qualifications of employees intended to be assigned on the project(s);
- Identification and qualifications of sub-consultants intended to be used on the project(s);
- Demonstrated ability to fulfill M/WBE goals;
- Demonstrates extensive experience in design and integration of Intelligent Transportation systems (ITS), i2-TMS central control software, traffic signal controllers, and traffic signal communications;
- Demonstrates extensive experience with AB3418 Protocol and National Transportation Communications for ITS Protocol (NTCIP);

- Demonstrates extensive experience with traditional and leading edge wireless communications technologies.

A committee appointed by the Director of Public Works and Engineering will review the submittals and recommend the most highly qualified submitting firms for sections. The PWE-100 Forms and previously completed engineer evaluations on file will be used along with the submittal document for each submitting firm's qualifications.

A pre-submittal meeting will be held at 3:00 PM on , Friday, June 8, 2007 in the George R. Brown Convention Center, Room 360 A, B, D, & E to discuss this and other solicitations. A firm may not have more than (2) members at this meeting.

Deadline: Seven (7) copies of a letter of interest notifying the City of Houston of the Provider's intent to be considered for these professional services, including qualifications and accompanying statements shall be addressed to the City of Houston, Department of Public works and Engineering, 611 Walker, 15th floor, Attention: Mr. Reid K. Mrnsy, P.E., Houston, Texas 77002 and will be received until 2:00 p.m. (CST) Wednesday, June 27, 2007 any submissions received after this time will not be considered. Submit qualifications in a sealed envelope and clearly identify RFQ number and firm name on outside of the envelope. If firms wish to be considered only for specific selections of the three listed below, please indicate such in the letter of interest.

Selection No. T06

N-0650: West Houston Advanced Traffic Management System (WHATMS)

- **Project Location:** The project area is bounded primarily by IH610, IH10, SH6 and the West Park Toll Road. Attached are maps 3 and 4 illustrating the proposed communications infrastructure and proposed ITS devices, respectively. The communication and ITS device locations are subject to change pending preliminary engineering.
- **General Scope:** This contract will be for a program manager to oversee the development of the West Houston Advanced Traffic management System (WHATMS). It will also include design review and integration for the entire system and shall consist of, but not limited to the following:
 - a. Program Management.
 - b. Development a Systems Engineering Management Plan (SEMP), Concept of Operations (CONOPS), and system requirements – the entire project will follow general systems Engineering approach.
 - c. Design review for entire system including, but not limited to:
 - Fiber optic communications.
 - Wireless communications network, using Ethernet radios with 900 MHz ISM band & Frequency-Hopping Spread-Spectrum (FHSS), within WHATMS area.
 - Closed-Circuit Television (CCTV).
 - Probe-based (AVI or LPR) system to measure real-time travel speeds.
 - Vehicle Counting Stations (VCS) to collect vehicle volume and spot speed data.
 - Video Detection System (VIVDS).

- Dynamic Message Signs (DMS).
- Satellite hub building for various ITS & communications technologies.
- d. System integration and testing for the entire system.

Selection No. T07

N-0650: West Houston Advanced Traffic Management System (WHATMS)

- **Project Location:** The project area is bounded primarily by IH610, IH10, SH6 and the West Park Toll Road. Attached are maps 3 and 4 illustrating the proposed communications infrastructure and proposed ITS devices, respectively. The communication and ITS device locations are subject to change pending preliminary engineering.
- **General Scope:** This contract will be for the development of plans, specifications and estimates for the items listed below. The West Houston Advanced Traffic management System (WHATMS), shall include, but not limited to the following:
 - a. Design a fiber optic communications network for signalized traffic signals.
 - b. Design a wireless communications network, using Ethernet radios with 900 MHz ISM band & Frequency-Hopping Spread-Spectrum (FHSS).
 - c. Design a Closed-Circuit Television (CCTV) network, which shall monitor traffic and identify/verify incidents within the WHATMS area and transmit the video to Houston TranStar.
 - d. Design probe-based (AVI or LPR) system to measure real-time travel speeds.
 - e. Design Vehicle Counting Stations (VCS) to collect vehicle volume and spot speed data.
 - f. Design Video Detection System (VIVDS) along 150+ signalized intersections.
 - g. Design Dynamic Message Signs (DMS)
 - h. Design satellite hub building for various ITS & communications technologies.
 - i. Development of specifications
 - j. Deliver assured Quality of Service (QoS).

Selection No. T08

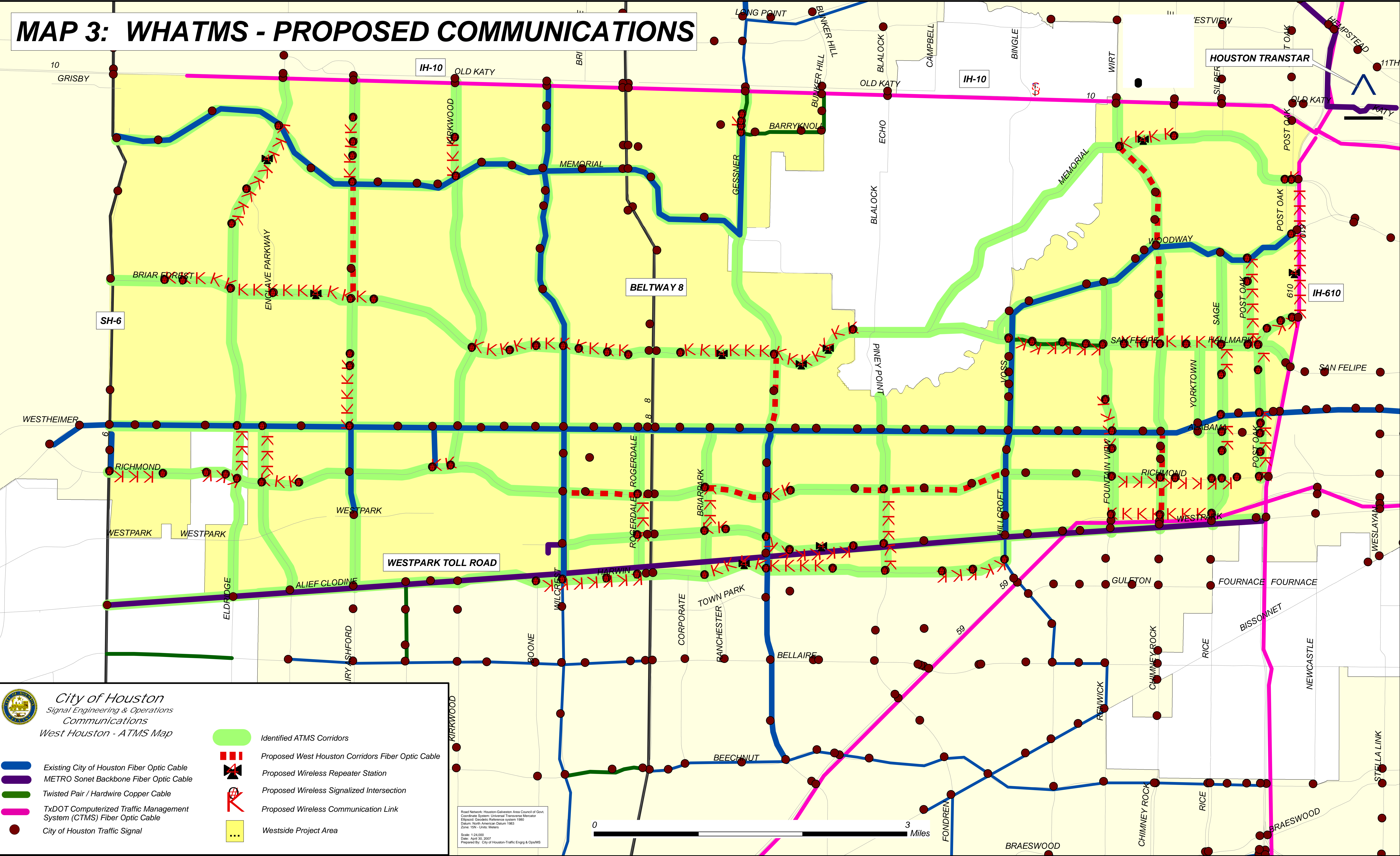
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MAP 3: WHATMS - PROPOSED COMMUNICATIONS



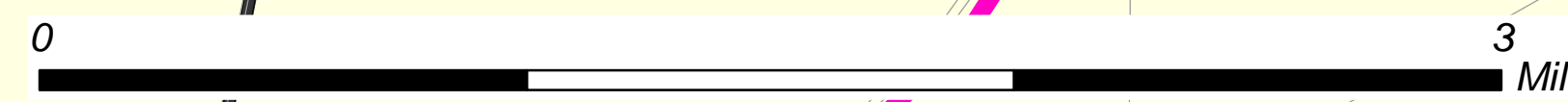


City of Houston
Signal Engineering & Operations
Communications
West Houston - ATMS Map

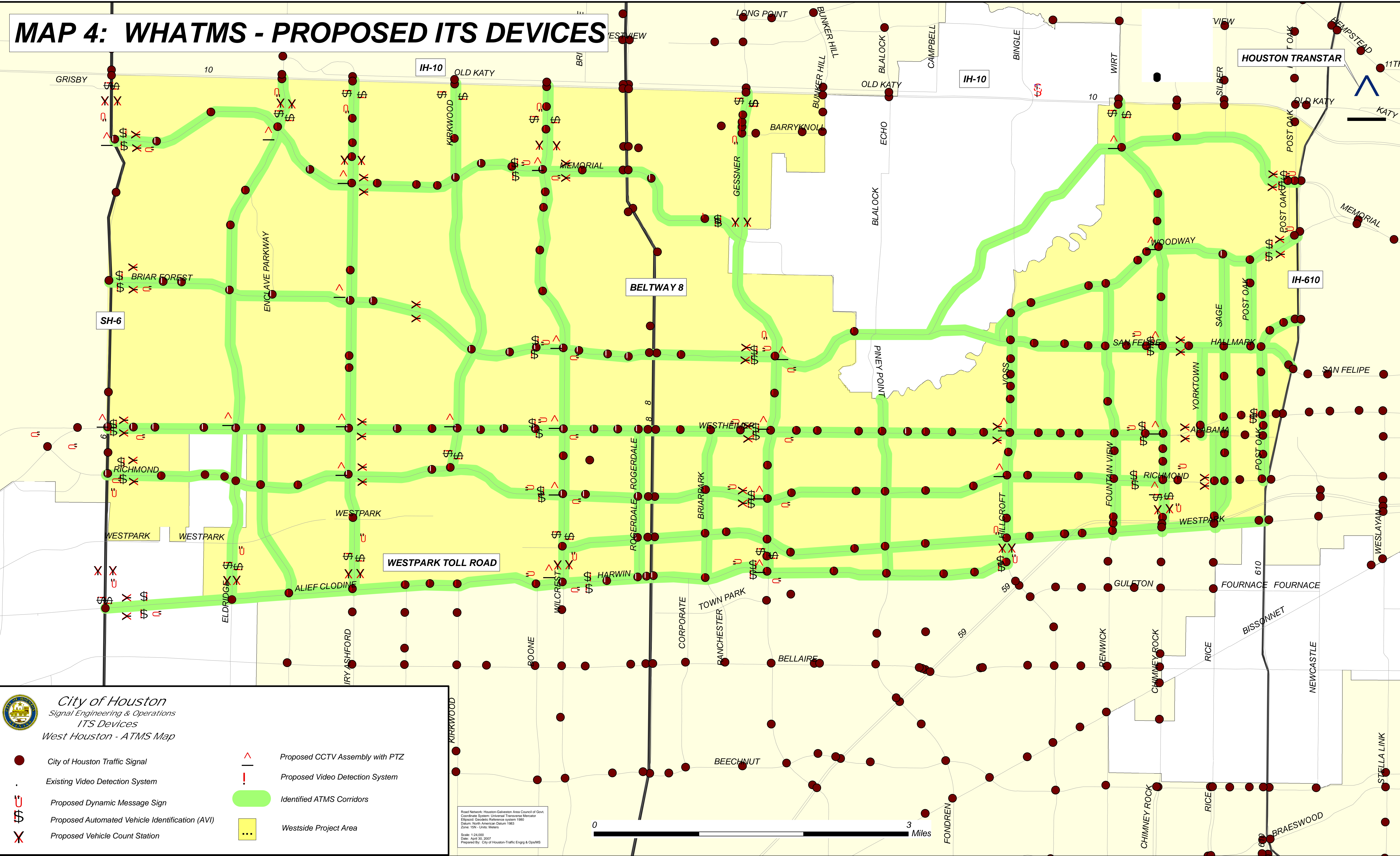
- Existing City of Houston Fiber Optic Cable
- METRO Sonet Backbone Fiber Optic Cable
- Twisted Pair / Hardwire Copper Cable
- TxDOT Computerized Traffic Management System (CTMS) Fiber Optic Cable
- City of Houston Traffic Signal


- Identified ATMS Corridors
- Proposed West Houston Corridors Fiber Optic Cable
- Proposed Wireless Repeater Station
- Proposed Wireless Signalized Intersection
- Proposed Wireless Communication Link
- Westside Project Area

Road Network: Houston-Galveston Area Council of Govt.
Coordinate System: Universal Transverse Mercator
Ellipsoid: Geoidetic Reference System 1983
Datum: North American Datum 1983
Zone: 16N - Units: Meters
Scale: 1:24,000
Date: April 30, 2007
Prepared By: City of Houston-Traffic Engng & OpsMS











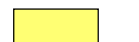
MAP 4: WHATMS - PROPOSED ITS DEVICES





City of Houston
Signal Engineering & Operations
ITS Devices
West Houston - ATMS Map

-  City of Houston Traffic Signal
-  Existing Video Detection System
-  Proposed Dynamic Message Sign
-  Proposed Automated Vehicle Identification (AVI)
-  Proposed Vehicle Count Station

-  Proposed CCTV Assembly with PTZ
-  Proposed Video Detection System
-  Identified ATMS Corridors
-  Westside Project Area

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